

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re:	Application No. 10/509,835)	
)	
Filed:	September 30, 2004)	<i>Confirmation No. 1058</i>
)	
Applicants:	Pascale Adolphine)	
	DE MEUTER et al.)	
)	
Title:	SUGAR-FREE HARD COATINGS)	
	PREPARED FROM LIQUID)	
	MALTITOL COMPRISING)	
	DP ₄ +FRACTION)	
)	
Art Unit:	1794)	
)	
Examiner:	Nikki H. Dees)	
)	
)	
Attorney Docket:	7393/84118)	
)	
Customer No.:	42798)	

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Mail Stop APPEAL BRIEF -- PATENTS
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37

Sir:

Applicants hereby petition under 37 CFR § 1.136(a) for a one-month extension of time in the above-captioned application, up to and including October 20, 2009, to make this reply timely.

Pursuant to 37 C.F.R. § 41.37, Applicants hereby respectfully submit the following Brief in support of their Appeal.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

TABLE OF CONTENTS

I.	Real Party in Interest	3
II.	Related Appeals and Interferences	3
III.	Status of Claims	3
IV.	Status of Amendments	3
V.	Summary of Claimed Subject Matter	4
VI.	Grounds of Rejection to Be Reviewed on Appeal	8
VII.	Argument	9
VIII.	Claims Appendix	20
IX.	Evidence Appendix	23
X.	Related Proceedings Appendix	24
XI.	Conclusion	25

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

I. REAL PARTY IN INTEREST

The real party in interest is Cerestar Holding B.V., having a primary place of business in Sas Van Gent, Netherlands.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to the Appellants, the Appellants' legal representative, or assignee that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 2, 5, 6, and 9-16 are pending and presently stand twice and finally rejected and constitute the subject matter of this appeal. Claims 3, 4, 7, and 8 are canceled. Claims 1 and 5 are the pending independent claims at issue in this appeal.

IV. STATUS OF AMENDMENTS

The claims stand as presented in the Amendment dated November 25, 2008 and as rejected in the Final Office Action mailed March 19, 2009. A Request For Reconsideration was filed on June 19, 2009. The Advisory Action mailed July 1, 2009 indicated that the Request For Reconsideration has been considered but does not place the application in condition for allowance.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

V. SUMMARY OF CLAIMED SUBJECT MATTER

There are two (2) independent claims pending in this appeal (claims 1 and 5).^{1,2} The claims are directed to sugar-free hard-coated comestibles (claim 1) and a process for preparing sugar-free hard-coated comestibles (claim 5).

The Applicants provide comestibles consisting of a hard coating and an edible, chewable and/or pharmaceutical core. The hard core is obtainable by using a coating syrup comprising at least 95% maltitol. The coating is further characterised in that dry matter content of the syrup is from 68-72% and the dry matter content of the syrup comprises from 0.7-1.5% by weight of DP₄₊. The Applicants further provide a process for preparing sugar-free hard-coated comestibles comprising applying a coating syrup, containing a maltitol syrup onto the cores of the comestibles in a moving bed of the coating apparatus, applying maltitol in powdered form, and drying the coated cores by using air drying.

A. Independent Claim 1

Sugar-free hard coated comestibles are provided. The sugar-free hard coated comestibles consist of a hard coating and an edible, chewable and/or pharmaceutical core. The core is elected from the group consisting of pharmaceutical tablets, chewing gum, confectionary product, chocolate, and nut. The hard coating is attainable by using a coating syrup comprising at least 95% maltitol. The hard coating is further characterised in that dry matter content of the syrup is from 68-72% and the dry matter of the syrup comprises from 0.7-1.5% by weight DP₄₊.

¹ None of the claims subject to the present appeal include any means-plus-function or step-plus-function claim recitations. Accordingly, as per 37 C.F.R. § 41.37(c)(1), there are no such recitations to be identified and mapped in a corresponding manner to the specification and drawings.

² It should be understood that this summary and map of the independent claims is only intended as a brief summary. Applicants do not represent or intend that the summary and map, or the accompanying references to the drawings and the specification, comprise an exhaustive presentation of the claims. As always, the claims are to be viewed and interpreted within the legal framework for claim construction, which may include the context of the entire specification as a whole.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

For convenience to the reader, independent claim 1 has been mapped below with relevant supporting citations to the specification.

<u>Claim 1</u>	<u>Specification</u>
Sugar-free hard-coated comestibles consisting of a hard coating and an edible, chewable and/or pharmaceutical core that is elected from the group consisting of pharmaceutical tablets, chewing gum, confectionery product, chocolate and nut, and	Page 3, lines 8-9; page 5, lines 3-5
said hard coating is obtainable by using a coating syrup comprising at least 95% maltitol and characterised in that	Page 3, lines 9-10
a) dry matter content of syrup is from 68-72%, and	Page 3, lines 10-11
b) dry matter content of syrup is comprising from 0.7-1.5% by weight of DP ₄₊ .	Page 3, lines 11-12

B. Claims 2 and 9-14 Depend From Claim 1

In one aspect, the sugar free-comestibles are characterised in that the maltitol syrup consists of from 95-97% by weight of maltitol, a maximum of 1.5% by weight DP₁, from 0-1.5% by weight of DP₃ and from 0.7-1.5% by weight of DP₄₊ (claim 2).³ In another aspect, the syrup has a dry matter content from 70-72% (claim 9).⁴ In yet another aspect, the comestibles have a smooth, regular surface (claim 10).⁵ In one aspect, the core is chewing gum, the hard coating is non-sticky, and the surface of the hard coating is regularly formed and remains intact during processing (claim 11).⁶ In another aspect, the hard coating has a homogenous surface

³ Specification at page 3, lines 13-18.

⁴ Specification at page 4, line 1.

⁵ Specification at page 3, lines 5-6.

⁶ Specification at page 5, lines 6-8.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

(claim 12).⁷ In yet another aspect, the hard coating consists of 1 to 100 layers (claim 13).⁸ In another aspect, the maltitol syrup contains 0 to 1.5% by weight DP₃ (claim 14).⁹

C. Independent Claim 5

A process for preparing sugar-free hard-coated comestibles is provided. A coating syrup containing a maltitol syrup is applied onto the cores of the comestibles in a moving bed of a coating apparatus. Maltitol powder is applied in powder form for obtaining coated cores. The coated cores are then dried by using drying air in the temperature range of 15 to 45°C and a moisture content of at most 50% relative humidity. The process is characterised in that the maltitol syrup has a dry matter content from 68-72% and the maltitol syrup comprises 0.7-1.5% by weight of DP₄₊.

For convenience to the reader, independent claim 1 has been mapped below with relevant supporting citations to the specification.

⁷ Specification at page 4, lines 1-2; page 6, lines 11-12, FIG. 1.

⁸ Specification at page 4, line 25-26.

⁹ Specification at page 3, line 17.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

<u>Claim 5</u>	<u>Specification</u>
Process for preparing sugar-free hard-coated comestibles and said process comprising the following steps:	Page 4, lines 3-5
a) applying a coating syrup, containing a maltitol syrup, onto the cores of the comestibles in a moving bed of a coating apparatus,	Page 4, lines 6-7
b) applying maltitol in powder form for obtaining coated cores,	Page 4, line 8
c) drying the coated cores by using drying air in the temperature range of from 15 to 45°C and a moisture content of at most 50% relative humidity, and said process is characterised in that maltitol syrups of step a) has a dry matter content from 68-72% and said maltitol syrup comprises 0.7-1.5% by weight of DP ₄₊ .	Page 4, lines 9-13

D. Claims 6 and 15-16 Depend From Claim 5

In one aspect, the maltitol syrup consists of from 95-97% by weight of maltitol, a maximum of 1.5% by weight DP₁, from 0-1.5% by weight of DP₃, and from 0.7-1.5% by weight of DP₄₊ (claim 6).¹⁰ In another aspect, the cores comprise chocolate (claim 15).¹¹ In yet another aspect, the cores comprise nuts (claim 16).¹²

¹⁰ Specification at page 4, lines 14-19.

¹¹ Specification at page 5, line 5.

¹² Specification at page 5, line 5.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. Are claims 1, 2, and 9-14 obvious under 35 U.S.C. § 103(a) over US 4,840,797 (Boursier) (hereinafter "Boursier") in view of US 4,849,023 (Devos et al.) (hereinafter "Devos") and US 5,470,591 (Ribadeau-Dumas et al.) (hereinafter "Ribadeau-Dumas")?
- B. Are claims 5, 6, 15, and 16 obvious under 35 U.S.C. § 103(a) over US 6,558,722 (Corriveau et al.) (hereinafter "Corriveau") in view of Devos?

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

VII. ARGUMENT

A. **Claims 1, 2 and 9-14 are patentable over Boursier in view of Devos, and Ribadeau-Dumas.**

Of claims 1, 2, and 9-14, only claim 1¹³ is independent.

Applicants submit that claims 1, 2 and 9-14 would not have been obvious to one of ordinary skill in the art in view of Boursier, even if Boursier were combined with Devos. Applicants additionally submit that Ribadeau-Dumas effectively teaches away from the present invention. Since Ribadeau-Dumas affirmatively teaches away, it is courteously suggested that the obviousness rejection over this trio of references be favorably reconsidered and withdrawn.

1. **Boursier does not describe, nor would it have suggested, the claimed inventions.**

A broad range as in Boursier does not describe a narrower range, nor would the broad range have suggested the narrower range. Boursier may mention a relative range, but that neither describes Applicants' range, nor suggests such range. As the Federal Circuit explained in the analogous situation in *Atofina*:

A temperature range of over 100 degrees is not a small genus and the range of temperatures of JP 51-82206 does not disclose Atofina's temperature range

...

and

[m]oreover, the disclosure of a range of 150 to 350°C does not constitute a specific disclosure of the endpoints of that range, i.e., 150°C and 350°C, as Great Lakes asserts. The disclosure is only that of a range, not a specific temperature in that range, and the disclosure of a range is no more a

¹³ Claim 1. Sugar-free hard-coated comestibles consisting of a hard coating and an edible, chewable and/or pharmaceutical core that is elected from the group consisting of pharmaceutical tablets, chewing gum, confectionery product, chocolate and nut, and said hard coating is obtainable by using a coating syrup comprising at least 95% maltitol and characterised in that

a) dry matter content of syrup is from 68-72%, and

b) dry matter content of syrup is comprising from 0.7-1.5% by weight of DP₄₊.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

disclosure of the end points of the range than it is of each of the intermediate points. Thus, JP 51-82206 does not disclose a specific embodiment of the claimed temperature range.

Atofina v. Great Lakes Chemical, 78 U.S.P.Q.2d 1417, 1423 (Fed. Cir. 2006).

Boursier does not describe, nor would it have taught, the syrup having a dry matter content of from 68-72% as in claim 1. In fact, Boursier apparently would have taught a range of from 55-65 wt% (column 2, line 40), but that would not have suggested Applicants' higher range of 68-72%.

Boursier does not describe, nor would it have taught, the syrup having the *dry* matter content of from 70-72% as in claim 9.

Boursier does not describe, nor would it have taught, the hard coating having a homogeneous surface as in claim 12.

Boursier would not have taught the person of ordinary skill in the art that a dry matter content of syrup comprises from 0.7-1.5 wt% of DP₄₊ as in claim 1, claim 2, claim 5, and claim 6.

Boursier teaches directly away from the claimed inventions, including those in claims 1, 2, 9, 10, and 11. Boursier specifically admits that “[b]eyond 65% the crystallization is irregular and surface defects appear; below 50%, the chewing-gums are sticky and the dry times considerable.” Boursier, column 6, lines 19-21 (emphasis added). Boursier, therefore, would not have suggested the dry contents in claims 1, 2, or 9, nor would it have suggested “comestibles have a smooth, regular surface” when the dry content is above 65%. Hence, Boursier teaches away from the chewing gum according to claim 1 or, for instance, claim 11 (former claim 4).

In response to Applicants' argument that Boursier teaches away from the claimed range of dry matter in the syrup, the Examiner asserts in the “Response to Arguments” section of the Final Office Action dated March 19, 2009:

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

In response, Table IV of Boursier teaches a syrup having a richness of 97% maltitol and a dry matter content of 70%. This is not only within applicant's claimed range of 68-72%, but touches applicant's preferred range from 70-72%. Further Boursier claims the syrup with a dry matter ranging from 50 to 70% (claim 1). (Office Action, page 6).

However, the Applicants point out that in Table IV, when the value of the dry matter content is 70% Boursier categorizes the quality of the hard coating product obtained as "**very mediocre**" (Table IV, Experiment No. 12) and further describes the results stating "[b]eyond 65% the crystallization is irregular and surface defects appear; below 50%, the chewing-gums are sticky and the dry times considerable." Boursier, column 6, lines 19-21. The totality of the prior art must be considered, and proceeding contrary to accepted wisdom in the art is evidence of nonobviousness. *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986). The Applicants have discovered that, contrary to Boursier, a dry content range of 68-72% provides the presently claimed sugar-free hard-coated comestible. The same argument applies in consideration of claim 9. Furthermore, Boursier would further teach away from claim 10, reciting "the comestibles have a smooth, regular surface" and claim 12 reciting the "hard coating has a homogeneous surface."

Thus, although stated in Boursier (column 3, line 45), that the hard coating may show a smooth surface essentially free from imperfections and being stable, these results are explicitly not obtained when one deviates from the specific features according to Boursier. Further, there is no indication that one would be encouraged to go for a high dry matter substance or make sure that other byproducts, such as DP₄₊, are present in the maltitol syrup. Actually, the cited prior art instead focused on a lower dry substance of the maltitol syrup and higher purity (higher content of maltitol) of the syrup.

In summary, Boursier shows it is better to use high purity maltitol syrup at a low dry matter substance, and this may result in a smooth surface that is essentially free of imperfections. This finding does not teach the use of a syrup that contains different components or impurities.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

2. Applicants' specification provides rebuttal to citation and reliance on Boursier.

Applicants' comestibles with a hard coating exhibiting a homogeneous surface are the antithesis of what Boursier discloses, and Applicants' discovery of the problem and their inventive solution for overcoming it is not suggested by Boursier alone, nor even if Boursier were combined with Devos, inasmuch as the latter shows no awareness of the problem or a way of solving it.

The present specification includes the evidentiary basis that shows Applicants' invention would have been unobvious. The evidentiary basis effectively rebuts any *prima facie* case even if, *arguendo*, such a case were allegedly established.

Applicants' specification discloses to those skilled in the art that Boursier's EP 0 201 412 (EP 0 201 412 is the U.S. counterpart to the Boursier reference) describes:

a confectionary or pharmaceutical product provided with a hard, sugarless coating obtained by hard coating using a maltitol syrup having a dry matter content of from 50-75% by weight, the coating being essentially crystalline and comprising at least 90% by weight of maltitol (specification, page 1, paragraph 4).

Applicants' specification further discloses for those skilled in the art that according to Boursier:

EP 0 201 412 describes a maltitol syrup which is consisting of 97.1% by weight of maltitol, 1.1% by weight of sorbitol and 1.8% by weight of maltotriitol. **Said syrup is devoid of any DP₄₊ fraction, and it is clearly demonstrated that it is not possible to obtain a regular surface when applying the maltitol syrup at a dry substance content higher than 65%. In cases where higher drier substance is used, the crystallization is irregular and defects on the surface appear.**

Specification, page 3, penultimate paragraph, emphasis added; see also Boursier at column 8, lines 19-21 (emphasis added).

Indeed, Applicants' specification, which was verified with the oath and declaration, includes the evidentiary summation:

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

Surprisingly, the current invention demonstrates that maltitol syrups containing from 0.7-1.5% DP4+ on dry matter content, and from 95-97% maltitol on dry matter content, are suitable to use syrups at a dry substance higher than 65%, i.e. at dry substance of 68-72% and yet regular hard coatings are obtained (see FIG. 1). Preferably, maltitol syrups having a dry matter content from 70-72%, result in a **hard coating with a homogenous surface**.

Specification, as filed, page 3 bridging to page 4 (emphasis added).¹⁴

Specifically, Boursier indicates the patent relates to a confectionery or pharmaceutical product with sugarless coating obtained by hard coating (column 1, line 7). Further, Boursier specifies that the dry substance matter of the maltitol syrup is from 50-70%. For example, Boursier (at column 2, line 53), provides an example of proven satisfactory maltitol having the following composition:

Maltitol: 97.1 %

Sorbitol: 1.1 %

Maltotriitol: 1.8%

It is noted that in this composition, there is no room for allowing any further component. The composition consists of these three products, yet it has proven satisfying.

Further, Boursier indicates the hard coating may show a smooth surface that is essentially free from imperfections and is stable. (Column 3, line 45.) However, additional disclosure of the specification makes it clear the hard coating may show a smooth surface that is essentially free from imperfections and is stable, but this is not an absolute. Thus, certain criteria must be fulfilled in order to obtain satisfactory results. Boursier further confirms the

¹⁴ "It should not be necessary for this court to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the 'subject matter as a whole' which should always be considered in determining the obviousness of an invention under 35 U.S.C. 103. *In re Antonson*, 47 CCPA 740, 272 F.2d 948, 124 USPQ 132, *In re Linnert*, 50 CCPA 753, 309 F.2d 498, 135 USPQ 307. This court must be ever alert not to read obviousness into an invention on the basis of the applicant's own statements; that is, we must view the prior art without reading into that art appellant's teachings. ..." *In re Spinnoble*, 160 U.S.P.Q. 237, 243 (CCPA 1969).

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

actual composition of the maltitol syrup, which essentially consists of maltitol and has a certain sorbitol and maltotriitol content (column 4, line 44)(emphasis added).

Boursier describes the importance of the actual content of maltitol. The maltitol richness is described as between 92% to 97%, and only with a maltitol content of 96% and 97% are the coatings obtained that are quite correct, the crystallization of maltitol is achieved regularly, and requires only a slightly greater drying time in the case of the syrup with 96% richness. (Column 5, line 35.) It is known in the art that for syrups with 95% and 92% richness, the chewing gums have a tendency to stick together, crystallization is difficult, and the drying times are long.

In contrast, the current invention, as claimed in claim 2, explicitly includes syrups with a maltitol content of 95%, yet none of these defects are observed. Indeed, the present specification additionally teaches Applicants' invention concerns "[e]specially a sugar-free hard-coated comestible wherein the core is regularly formed and remains intact during processing and during any post-treatment (such as packaging)." Specification, as filed, page 5, paragraph starting at line 5.

3. Devos would not have suggested changing the approach dictated according to the Boursier reference.

Devos discloses the availability of a maltitol syrup containing DP₄₊ byproducts. Specifically, Devos cites the syrup contains from 87-97.5% maltitol and less than 1% of maltotetraitol and hydrogenated products of a higher molecular weight. (Column 4, line 24.) Devos also specifies that the dry matter is higher than 65%. (Column 4, line 43.)

It is known, that this type of syrup can be applied for its sweetening effect (*see* column 5, line 38). However, Boursier shows it would be unreasonable to use the syrup of Devos. The purity of the maltitol is not adequate, the dry matter content is too high, and there is no reason to assume at the outset that the presence of DP₄₊ would solve all the technical problems encountered. Thus there would be no suggestion to combine these two references. If a proposed modification would render the prior art invention being modified unsatisfactory

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP 2143.01.

Nonetheless, despite the Boursier disclosure of surface defects and irregularities at dry contents greater than 65%, the Office Action asserts a different composition according to Devos, with alleged dry contents greater than 65%, would have been substituted into Boursier. Devos is inconsistent with Boursier, and there would have been no expectation of success as to Applicants' claimed inventions.

Therefore, even if, for the sake of argument only, one were to have engaged in hindsight modification of the Boursier reference according to the Office Action, the expected result would, at best, be an irregular crystallization and defects on the surface of the sugar-coated comestible that would be a disadvantageous, undesirable, and unacceptable result. Why? Boursier made it clear that "[b]eyond 65%, the crystallization is irregular and surface defects appear..." Column 6, lines 19-21.¹⁵

Applicants have achieved success, whereas the approach postulated according to the Office Action results in failure for the reasons set forth in the Boursier reference. Applicants' evidentiary showing is consistent with the results and is illustrated in FIG. 1. FIG. 1 is a photograph with magnification of 6 x 10. The photograph shows that the hard coating prepared with the liquid maltitol syrup of 96% maltitol and 0.7-1.5% by weight of DP₄₊ based on dry matter yields a smooth regular surface.

Once Applicants demonstrated the DP₄₊ can overcome the matters shown to be problematic in Boursier, it may seem in retrospect simple, but that is simply based on the Examiner's hindsight based on the results reported in the Application. Thus, the references would not have been combined, and even if they were, there would have been no reason to

¹⁵ "Notwithstanding our analysis above, concerning appellant's recognition of the source of the problem and solution thereof, we believe that the multi-reference rejection *affirmed* below is improper for reasons existing within the disclosures of the references themselves, namely, that the references themselves teach away from the combination." *In re Spinnoble*, 160 USPQ at 244 (emphasis added).

substitute Devos's different composition for the composition in Boursier, nor would there have been a reasonable expectation of success.

4. Ribadeau-Dumas does not provide motivation, suggestion, teaching or reason to modify the inadequate combination of Boursier and Devos to reach Applicants' invention.

Ribadeau-Dumas affirmatively teaches there must be a **high concentration of DP₄₊** components. Indeed, the amount taught is more than double the amount recited in Applicants' claims. This teaching away undercuts the retrospectively guided reconstruction of the claimed inventions from Boursier and Devos.

Ribadeau-Dumas exemplify the "high concentration" as being "more than 3% expressed on a dry matter basis of molecules having a molecular weight greater than 1,300 daltons." Ribadeau-Dumas, column 4, lines 61-63. *See also*, column 5, lines 1-3 ("3 to 19% of molecules having a molecular weight greater than 1,300 daltons"); column 6, lines 60-65 ("containing more than 3% of molecules having a molecular weight greater than 1,300 daltons"); column 7, lines 44-51 ("more than 3%, preferably 5 to 19%, more preferably 7 to 19%"); to column 14, line 18 ("polysaccharides with a molecular weight >1,300: 20.3%").

As to the "high concentration," Ribadeau-Dumas teaches that they "found a very effective means for achieving the control of propagation of crystallization of maltitol and [have] developed a process for controlling propagation of crystallization of maltitol contained in a crystallizable sweetening syrup or a confectionary product such as in a boiled sugar or a semicrystallized item." Ribadeau-Dumas, column 5, lines 39-45.¹⁶ Ribadeau-Dumas then expressly state that their anticrystallizing agents "are found to be **solely good inhibitors** of crystallization when they are present **in high concentration**, or alternatively mere retarders of crystallization at low concentration insofar as they retard, in this case, solely over time, the

¹⁶ A boiled sugar typically refers to water, and a high sugar concentration mixture, boiled to the point of supersaturation with sugar, once supersaturated is then cooled, and a plastic glassy mass containing little water (less than about 2% water) is formed. These high-boiled sugars are unstable, and can readily harden to an irregular glassy state unless stabilized.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

time of appearance of maltitol crystals, such that the problem described above cannot be solved by the use of such molecules." Ribadeau-Dumas, column 5, lines 53-56 (emphasis added).

Ribadeau-Dumas might be said, therefore, to direct the presence of DP₄₊ components at levels at least 200% higher than called for in Applicants' claims. Ribadeau-Dumas apparently teach unpredictable graining (column 2, line 57 et seq., and column 5, lines 58-59), or extreme softness (column 3, lines 3-10, and column 5, lines 58-59), remain if the DP₄₊ components are not present in the "high concentrations" (column 5, line 55).

Applicants' claims 2, 6, and 14 recite less than 1.5% by weight DP₁ or 0 to 1.5% by weight DP₃, and this range would not have been suggested by the Ribadeau-Dumas reference. While the reference refers to DP₃₊, such as in column 7, Ribadeau-Dumas teaches preferences that lead away from the range recited in claims 2, 6, and 14. Ribadeau-Dumas discloses, for instance, amounts of DP₃₊ are "preferably between 1 and 12%, and still more preferably between 2 and 9%" (column 7, lines 27-28), and it discloses as to molecules having a molecular weight close to maltotriitol, an amount "preferably between 0.1 and 14%, more preferably between 4 and 9%" (column 7, lines 27-28). With its preference for higher amounts of DP₃₊, Ribadeau-Dumas again shows it is distinct from the present claimed inventions. Besides, the ranges do not describe Applicants' range (*see, e.g., Atofina, supra*), nor would they have suggested such claimed range.

The Examiner asserts that she has not relied on Ribadeau-Dumas for teaching a higher range of DP₃₊ concentration, but rather the example composition of Boursier at column 2, line 57, having a maltotriitol component at 1.8% by weight renders the Applicants' claims to DP₃ concentration of 0-1.5% by weight obvious. The Examiner continues that the difference of 0.3 wt% higher would not be expected to result in a patentably distinct coating composition. (Office Action, page 7). However, the Applicants point out that what the Examiner is proposing is to expand the claimed range by 20% for the convenience of the rejection.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

Boursier does not disclose or suggest a DP3 component of less than 1.8% by weight and therefore cannot be said to render obvious a concentration of 0-1.5% by weight as presently claimed.

Applicants, therefore, earnestly but courteously solicit favorable reconsideration and withdrawal of the characterization of the Ribadeau-Dumas reference in the Office Action, pages 3-4 and paragraphs 7, 8, and 9, and thence withdrawal the obviousness rejection based on the combination of Boursier, Devos and Ribadeau-Dumas.

In summary, Applicants submit there is no practical way in which Applicants' claim 1 can be shown to have been obvious in view of the disclosures of the three applied references, alone or in any combination. Similarly, the dependent claims should be considered unobvious for at least theses same reasons.

B. Claims 5, 6, 15, and 16 are patentable over Corriveau in view of Devos.

Of claims 5, 6, 15, and 16, only claim 5¹⁷ is independent.

1. Claims 5, 6, 14 and 15 define unobvious inventions over the combination of Corriveau and Devos.

Applicants courteously but earnestly submit claims 5 and 6 define unobvious inventions over Corriveau taken in view of Devos. Dependent claims 14 and 15 refer to chocolate and nuts, which appear to be inconsistent with Corriveau (*see* column 1, lines 15-20).

Corriveau is simply applied as disclosing a process for coating a center. However, Corriveau provides no disclosure that anticipates or renders obvious the compositional make-up of the maltitol syrup as provided in claim 5. Rather, the Examiner has applied

¹⁷ Claim 5. Process for preparing sugar-free hard-coated comestibles and said process comprising the following steps:

a) applying a coating syrup, containing a maltitol syrup, onto the cores of the comestibles in a moving bed of a coating apparatus,
b) applying maltitol in powder form for obtaining coated cores,
c) drying the coated cores by using drying air in the temperature range of from 15 to 45°C and a moisture content of at most 50% relative humidity, and said process is characterised in that maltitol syrups of step a) has a dry matter content from 68-72% and said maltitol syrup comprises 0.7-1.5% by weight of DP₄₊.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

Devos. Applicants submit that there would have been no reasonable expectation of success even if a person of ordinary skill in the art had undertaken the statutorily proscribed hindsight - retrospective analysis - detailed in the Office Action. Even if the hindsight guided retrospective analysis were appropriate, which it is not (as seen from the statutory command in 35 U.S.C. § 103(a)), the specification herein details the evidentiary basis that refutes the result postulated in the Office Action, i.e., shows at the very least that the approach would not have been expected to be successful.

In summary, Applicants submit there is no practical way in which Applicants' claim 5 can be shown to have been obvious in view of the disclosures of the applied references, alone or in any combination. Similarly, the dependent claims should be considered unobvious for at least the same reasons.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

VIII. CLAIMS APPENDIX

1. Sugar-free hard-coated comestibles consisting of a hard coating and an edible, chewable and/or pharmaceutical core that is elected from the group consisting of pharmaceutical tablets, chewing gum, confectionery product, chocolate and nut, and said hard coating is obtainable by using a coating syrup comprising at least 95% maltitol and characterised in that

- a) dry matter content of syrup is from 68-72%, and
- b) dry matter content of syrup is comprising from 0.7-1.5% by weight of DP₄₊.

2. Sugar-free hard-coated comestibles according to claim 1, characterised in that said maltitol syrup consists of:

- a) from 95-97% by weight of maltitol,
- b) a maximum of 1.5% by weight of DP₁,
- c) from 0-1.5% by weight of DP₃,
- d) from 0.7-1.5% by weight of DP₄₊.

5. Process for preparing sugar-free hard-coated comestibles and said process comprising the following steps:

- a) applying a coating syrup, containing a maltitol syrup, onto the cores of the comestibles in a moving bed of a coating apparatus,
- b) applying maltitol in powder form for obtaining coated cores,
- c) drying the coated cores by using drying air in the temperature range of from 15 to 45°C and a moisture content of at most 50% relative humidity, and said process is characterised in that maltitol syrups of step a) has a dry matter content from 68-72% and said maltitol syrup comprises 0.7-1.5% by weight of DP₄₊.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

6. Process according to claim 5 characterised in that in step a) dry matter of maltitol syrup is consisting of:

- a) from 95-97% by weight of maltitol,
- b) a maximum of 1.5% by weight of DP1,
- c) from 0-1.5% by weight of DP3,
- d) from 0.7-1.5% by weight of DP₄₊.

9. Sugar-free comestibles according to claim 1, characterized in that the dry matter content of said syrup is from 70-72%.

10. Sugar-free comestibles according to claim 1, characterized in that said comestibles have a smooth, regular surface.

11. Sugar-free comestibles according to any one of claims 1, 2, 9 or 10, characterised in that the core is chewing gum and the hard coating is non-sticky and the surface of the hard coating is regularly formed and remains intact during processing.

12. Sugar-free comestibles according to claim 9, wherein said hard coating has a homogeneous surface.

13. Sugar-free comestibles according to claim 1, wherein said hard coating consists of 1 to 100 layers.

14. Sugar-free comestibles according to claim 1, wherein said maltitol syrup contains 0 to 1.5% by weight DP₄₊.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

15. The process according to claim 5, wherein said cores comprise chocolate.
16. The process according to claim 5, wherein said cores comprise nuts.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

IX. EVIDENCE APPENDIX

None.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

X. RELATED PROCEEDINGS APPENDIX

None.

Application No. 10/509,835

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37 dated October 6, 2009

Reply to Office Action/Decision of Primary Examiner of March 19, 2009

Notice of Appeal filed July 20, 2009

XI. CONCLUSION

In view of the foregoing discussion, Applicants respectfully request reversal of the rejected, pending claims.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

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